Are New Products Driving Your Bottom Line?
FIVE STEPS TO RAPIDLY IMPROVED INNOVATION RESULTS

By Michael A. Dalton

When innovation works it can be the lifeblood of corporate growth. However, when innovation isn’t delivering, that life starts to drain out and you begin to feel the hot breath of your competitors as they close the gap - or worse. As a business leader, you face a tough contradiction. Just when you need the most from your innovation investment, you find your technology and marketing groups already feeling stretched too far. Adding process or teaching project and time management skills risks creating bureaucracy and just teaches people to run faster on the same treadmill – hardly a sustainable fix.

This 5 step guide offers a different answer. By taking a theory of constraints (TOC) based approach and showing you how to systematically attack the bottlenecks limiting your innovation, you will learn how to focus your improvement efforts and create tremendous leverage. Then by refocusing and redeploying existing staff and resources, you can rapidly improve your growth results while gradually creating a lasting culture of continuous innovation improvement.

Today’s innovation challenge

No question, innovation continues to be a business imperative and has become even more important in today’s economy. One recent study even found that an impressive 72% of executives now rank innovation in their top 3 priorities. But innovation remains a mystery for many companies with nearly half of CEO’s reporting dissatisfaction with their return on innovation spending. The results were even worse for industrial companies with 56% dissatisfied. This means that the average company spends millions, even tens of millions, developing new products and services without getting the growth and bottom line impact that they expect.

The good news is that you don’t need to invest any more than you already are to unravel the mystery and increase your innovation driven growth. It turns out that like many things, innovation isn’t about how much you spend as much as it is about how you spend it.

A different approach that you can use

Traditional improvement efforts are based on the premise that making each part of the organization or each step in the process stronger, makes the whole stronger.
Unfortunately, this just ends up diluting your efforts. But a TOC approach recognizes that processes are interdependent chains of activities. And the strength of a chain is not determined by the sum of its parts - but by its weakest link. Your efforts must be focused where they will have the most impact - on strengthening the weakest link in your innovation chain.

We have extended these concepts to the area of new product and service innovation. They provide a powerful tool for leveraging your efforts to create growth by attacking the issues that constrain your organization. In fact, the impact has shown to be as high as 1500% greater improvement than with traditional approaches. In the next section, we’ll introduce you to 5 powerful focusing steps for increasing the bottom line impact of your innovation investment.

5 steps drive innovation improvement

Whether in consumer or industrial markets, whether in products or services, improvement starts by evaluating your current process to find the innovation bottleneck – the constraint that is holding back faster growth. Then 5 focusing steps are used to eliminate that constraint and move on to the next with an increase in innovation throughput as each cycle of improvement is completed. Let’s start by taking a closer look at what is required.

Some prerequisites

To get started, you first have to have a goal. What are you going to improve? Your current operations are focused on the goal of making money today. So the goal of improving innovation must be to generate more money in the future - more money than your operations would generate without new products and services. The goal is not invention. Invention is simply the tool to achieve your goal.

Second, you have to know what metrics you will use to measure improvement. While there are many ways to measure innovation performance, throughput and cycle time are key. Throughput is the cash flow from the sales of new products and services over and above truly variable expenditures such as raw materials, components, and outside purchased services. Increasing throughput means more money or a higher return from your investment. Cycle time is the length of time it takes for a project to go from proposal to generating throughput. Decreasing cycle time means that your innovation begins paying off sooner.

1. IDENTIFY THE CONSTRAINT

What is blocking higher innovation performance? When you ask the people in your organization to help identify the constraints you’ll probably find no shortage of issues. But the key is to find the bottleneck constraint - the one that is limiting the output of the system. Before you get started, it is also helpful to review the following sections on process mapping and understanding constraints.
Process mapping

Having a map of your innovation process is critical because it allows you to understand where the process is breaking down.

- Are you getting too few new ideas from the market place?
- Do projects get delayed in development?
- Does the market really need your new products?

With a process map, you can ask team members across all functions where they see the symptoms that help identify the bottleneck.

- Where do the biggest delays occur?
- Where does there always seem to be a backlog of work?
- Where are downstream groups constantly idle and waiting?

Mapping your process doesn’t need to be complicated. The basic idea is to just sketch out how a new idea comes into your company and eventually becomes a product or service reality. Gather a few of your more seasoned commercial and development people - the ones who really get things done. Ask them to diagram how your best selling products and your most recent introductions were commercialized, and you’ll have a good start on the current process.

Understanding constraints

Constraints can occur internally or externally. Many companies find that they have a development constraint inside their organization. They have more projects and ideas than they can implement. Others struggle with not enough ideas or not enough high impact opportunities coming into the organization. Generally there are 3 types of constraints - policy, physical and market.

Policy or management constraints:

Policy or management constraints are the constraints that organizations unknowingly or voluntarily place upon themselves. As the law of unintended consequences predicts, companies can be very creative in adopting policies that inadvertently constrain growth, and policies make up the bulk of constraints affecting organizations. Unfortunately, policy constraints can be very deeply held and sometimes no one even knows the original reasons for their implementation.

The good news is that if you find that your bottleneck is a policy constraint, rapid improvements are possible. Of course, companies can be blind to their own policy constraints. Sometimes it takes an outside observer or a change in personnel to help challenge the status quo and facilitate the change. In addressing policy constraints, it is important to keep everyone focused on the overall system rather than individual or departmental concerns. Sometimes, it isn’t until people see the nega-
Since TOC is anything but academic fluff. In fact, some practitioners refer to it as constraints management for just this reason. So where is the evidence that TOC works in practice? Until recently, most of the evidence for TOC has been anecdotal examples from over 25 years of successful real world implementations in everything from small companies to single plants of multi-nationals like DuPont, General Motors and AT&T. However, just last year Sanmina-SCI, the $11 billion electronics component and assembly firm, released the first comprehensive study with statistical evidence of TOC’s impact. They conducted an internal evaluation putting traditional six sigma and lean implementations up against TOC used to focus the lean and six sigma tools. The results were stunning. While all 21 plants saw improved results, the 6 plants using TOC to focus efforts generated 89% of the total improvement. The other 15 plants generated only 11% of the results. By focusing on the constraints, TOC leveraged improvement efforts to produce 1500% greater improvement than traditional continuous improvement methods.

Physical or resource constraints:

Physical constraints, also called resource constraints, occur at either inputs, outputs or steps in the process. Physical constraints may appear to be the results of too few resources. Shared resources are frequently a source of conflict and the bottleneck that delays projects across the entire organization. But your response should not be a knee jerk reaction to run out and hire additional staff or buy more equipment. When a particular machine is a manufacturing bottleneck, TOC companies don’t just buy and install another machine. They defer that investment and first try to do more with current resources. Likewise, you should first maximize the output of existing innovation bottleneck resources before ever considering additions.

Market constraints:

Market constraints are the external constraints that occur when demands change leaving you with more capacity than the marketplace requires. Market constraints can be either physical or policy constraints which offers a dual challenge. Markets change and innovators must constantly keep an eye out for changes that make their current offering obsolete. For example, the fundamental shift to digital media is creating a market constraint for the commercial printing industry while also creating numerous new markets for search based advertising and digital printing.

Market constraints can also be policy constraints that result from a company’s choices. For example, what about products described as being ahead of their time? If the goal of innovation is to make more money, doesn’t launching a product that is ahead of its time mean that you’ve allowed yourself to spend money without a return. Haven’t internal policies and choices failed to reflect the market reality and instead let inertia carry projects along while continuing to allocate scarce R&D resources to work on a product that wasn’t needed? Another example is when your innovation has the potential to disrupt existing business models. In this case, choosing the existing market channels, which may not have motivations aligned with yours, can slow if not sabotage the success of your new product.

2. EXPLOIT THE CONSTRAINT’S CAPACITY

Now that you’ve identified your constraint, what can you do to fully exploit its capabilities? Here are 2 strategies that you can use:

- Create focus by assessing and evaluating opportunities so that the constraint only works on quality checked projects
- Prioritize opportunities so that the constraint is always working on the best possible opportunity ahead of others
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Create focus with uniform process & assessment

Without a concentrated effort to weed out underperforming or lower promise opportunities, 80% of new product results will tend to come from only 20% of your projects. This means that tremendous leverage is possible with even modest improvements in focus.

To illustrate this effect, one study showed the dramatic differences in focus between top and average performers in the telephony industry. The best in class companies (top 20% of performance) cancelled the same percentage of projects overall, but were able to cancel unattractive projects much earlier in the process allowing them to focus their development resources on the truly important projects. As a result, they kept more of the bottom 50% of ideas from entering the development process and completed projects in half the time and achieved double the percentage of revenue from new products as compared to their average competition.

To squeeze everything you can through the bottleneck, there just isn’t room for anything but the most promising projects. You need a uniform innovation process with an early assessment element to ensure that only the highest quality projects make it to your innovation bottleneck. Think of assessment as a hopper or funnel of potential projects at the front end your innovation process. This hopper has a sieve at its exit that makes sure that the losers are quickly diverted and that only potential winners are released to the constraint. Projects must be assessed for:

- Clear unmet or unarticulated market need
- Value of the solution to the customer
- Potential for a solution that can be delivered profitably
- Clear identification and evaluation of competitive alternatives.

These steps help ensure that the constraint will not be in the marketplace and that the project has promise before committing expensive, constrained resources such as development or testing. If the team has a compelling story consistent with company strategy, the next step is a project planning proposal with the first step being to test feasibility. You do have to be comfortable with some level of risk since feasibility resources are committed without a guarantee of success. But without some level of risk, there is a danger of cancelling projects too early, missing big ideas, and marginalizing product development to delivering only conservative line extensions.

Prioritize the constraint

* The 80/20 principle only applies across a sampling of independent projects. Since the steps within a project are dependent events, 80/20 does not apply to project management. (i.e. 80% of the project benefit is not realized by completing only 20% of the steps)
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Your innovation throughput can be improved immediately by giving the best projects priority access to the bottleneck. If your bottleneck moves from producing 8 units per unit of time with a value of 5 each to producing 5 with a value of 10 each, your throughput will increase by 25%. The key metric for innovation project prioritization is the expected throughput return per unit of bottleneck time. This is loosely analogous to return on R&D investment.

This can be difficult for managers who have been schooled in the paradigm of local optimization to accept. But maximizing the return per unit of constrained resource will maximize the global return for the system. Table 1 considers three projects for prioritization. If development time is the constrained resource, project C would deliver $250 of projected return per hour of development ranking it ahead of Projects B and A respectively. But if application testing is the shared resource constraint, A only requires a moderate amount of bottleneck time and delivers $250 per hour of constraint. That ranks it highest for global system throughput ahead of projects B and C respectively.

### Table 1.

<table>
<thead>
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<th>Project</th>
<th>Project A</th>
<th>Project B</th>
<th>Project C</th>
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Identify priority projects for higher innovation return

### 3. SUBORDINATE ALL ACTIVITIES TO THE CONSTRAINT

With an approach in place to fully exploit the constraint, how do you subordinate the organization’s priorities to the bottleneck and make sure that the all of your non-constrained resources help in this effort?

**Stop bad multitasking**

I regularly find organizations struggling with each of their key technical staff doing too many projects. Some companies’ job postings even list multitasking as a new skill requirement. These activity junkies have it upside down. The objective is not to work on more projects, but to actually complete projects that generate more throughput.

The bad multitasking we are concerned about here though is having the constraint switch back and forth between multiple projects without first completing an entire task. Studies show improved performance when technical staff are limited to a smaller number of projects and required to complete tasks before switching projects. In fact, productivity begins to drop rapidly when engineers are assigned to more than two projects. By the time they are involved in 5 projects, less than 30% of their time is spent on value adding activity.

The general manager of a mid-sized industrial equipment company came to us with just this issue. We identified the bottleneck constraint in the engineering and development group where they had far too many projects underway. They were consuming significant resources, but very few of them were making any progress. In fact, some of their best people were demoralized to the point where they were considering leaving. We quickly whittled their active project list down to four projects and the results were immediate. With significant new visibility into each project, the teams had a new sense of purpose. They took a new technology project that

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The Fallacy of Multitasking

Recent research shows that people aren’t actually capable of multitasking. So called multitasking is just the act of switching back and forth between tasks and actually reduces efficiency -
had a three year development horizon and using a combination of already avail-
able technologies began production of a new line of energy savings products with
95% of the benefits in less than 6 months.

Prioritization buffer
How do you keep the bottleneck from being interrupted or distracted with lower
priority tasks and activities? Your project management system must ensure that
the next highest priority task is always waiting and ready for the constraint. In a
TOC manufacturing setting, the constraint pulls work from an inventory buffer.
The same concept applies to innovation where you establish a buffer of prioritized
tasks. This way the constraint does not waste any time deciding what to do next.
The number of tasks waiting is set at safety level to cover the normal fluctuations
that you would expect in terms of the development group’s work. The upstream
groups continually monitor the buffer to make sure that they are timing release of
their work to keep the buffer at the safety level. As we will cover in the next sec-
tion, subordinating the non-constraints to the pace of the bottleneck and keeping
the safety buffer close to a minimum level minimizes project cycle time.

Avoid early starts
Since non-constraints have extra capacity, why shouldn’t they just get an early
start on the next task? If we have the resources to do projects 1, and 2 simultane-
ously and projects 3 and 4 are already queued up in the prioritization buffer how
much harm is there in letting projects 5 and 6 get a head start as well? After all,
good research managers know that people need something to keep them busy dur-
ing the inevitable breaks in a project. But remember, the non-constraints are
working to keep the prioritization buffer at a target level so we’re talking about
building an excess inventory of uncompleted tasks.

Parkinson’s Law
Parkinson’s Law was intended to be satirical, but it ends up being true –

“Work expands so as to fill the time available for its completion”

The end result is that starting pro-
jects early increases the cycle time of all projects.

One client has even begun keep-
ing an updated priority list posted
along with a sign that says

“If you are not working on one
of these projects, then what are
you doing today?”

People are constantly reminded
what should be getting their atten-
tion - Blunt, but effective.

There is ample evidence from JIT and Lean to show that releasing work ahead of
the required lead time actually increases the lead time required to complete all
jobs. What happens when the person that has gotten an early start on the number
5 project needs to jump back to help on the number 1 project? Do they immedi-
ately drop everything they were doing? Unlikely - When switching, they need time
to finish up and document the lower priority task resulting in more frequent de-
lays, decreased focus, and increased cycle time.

In order to maintain this focus, your innovation process must have a clear com-
munication mechanism. The process needs to have easy visibility into the status
of projects and the prioritization buffer. Depending on the duration of projects,
this can be as simple as 5 minute daily team meetings or a project intranet that is
regularly updated.

Help the constraint
As we’ve seen, non-constraint resources don’t help throughput by starting additional projects. Instead you should subordinate non-constraint resources to unload the constraint by either helping with tasks or helping eliminate tasks. Let’s take the case of a paint company with its constraint in applications performance testing. Anything the formulators can do to help the testing group or eliminate work for the testing group will improve throughput. This could be gathering together all of the testing materials needed before the project is released to the constraint, actually helping out in the testing lab, doing additional journal research to see if similar work has been reported, and it should even go as far as finding advanced experimental design techniques or modeling methods to reduce the number of samples required. By taking these steps, the formulators can take some of the load off the constrained testing group and help get more programs through the system in less time.

A client that was struggling with a product development project asked me to come in and see what could be done to get things back on track. When we looked at all the work that had to be done, it appeared that the engineering group was the bottleneck. But a closer look revealed that some of the work the engineers were doing could be done by other groups. Because one component of the project was a new control system the engineers had excitedly started working directly with potential suppliers in negotiating the specifications and price for a solution. Clearly engineering input was required, but we were able to offload a significant amount of the control system sourcing to the supply chain group. Common sense in hindsight, but it could have gone unnoticed had we not been looking for ways to unload the constraint.

Cross functional engagement

After all of the effort expended to exploit the constraint, the last thing you want to do is allow delays or mistakes downstream of the constraint to reduce throughput. Returning again to our paint example, what sense would it make to develop and test a new paint if they weren’t confident that it could be scaled to production or that they had the right channel to bring it to market. Your innovation process must subordinate resources across the organization to be involved in the innovation process. They must be involved early enough and frequently enough to ensure that downstream groups see no insurmountable hurdles and are ready to take the project forward quickly as soon as the constraint completes its work.

4. ELEVATE THE CAPACITY OF THE CONSTRAINT

After subordinating everything else to your plan for exploiting the constraint, what can you do to elevate or increase the capacity of your bottleneck innovation resources? So far, the first 3 steps have been focused on eliminating policies and changing the way you operate to make the constraint operate as efficiently as possible. The improvements, while not necessarily easy, should have been rapid and delivered a high return on investment. The elevate step starts to ratchet up the in-
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Investment (training, partnerships, staff, equipment, etc) so you should not proceed until you have exhausted steps 2 and 3.

Let’s look at some of the levers that you can pull to elevate the capacity and capability of innovation constraints before adding fixed expenses and investments in the way of staff, equipment, and facilities.

Customer Value Lens:

Does your organization have a clear understanding of what customers’ value and what their unmet needs are? Do you know where their pain is, how to make them acutely aware of it, and how to position your new product as the solution? Or does your staff focus on the features of your products rather than the benefits that customers buy. Elevating these critical innovation and marketing abilities can pay big dividends.

Industrial B2B markets:

In a business to business setting, TOC provides a powerful lens for examining how you can add value for customers and how you communicate that value in your marketing and sales efforts. Since your customer’s goal is also to make money now and in the future, the only way you can truly create superior value and induce them to buy is by helping them to make more money.

WIFM

Innovation requires a shift from What’s In it For Me? thinking to understanding what creates customer value:

What’s In it For Them?

ΔT - Increase in Throughput
ΔI - Reduction in Inventory and Investment
ΔOE - Reduction in Operating Expenditures

Note that throughput (ΔT) is listed first for a reason. While maintaining a strong cost position is important, cost improvements can lead to diminishing returns when overdone. On the other hand, increases in throughput are bound only by your skill and creativity in finding new solutions and creating new market opportunities. How much more managerial effort do you think Apple puts on generating new throughput vs. cost control?

Market facing activities and customer visit work (different than sales calls) must be directed to identifying unmet customer needs and then using the customer value lens of ΔT, I, and OE to understand the value created. When products are launched that value must be communicated through both marketing and sales efforts using the language of the various decision makers. It’s always about the customer’s pain and how you help solve it. But at the operational level, it’s about their unit cost targets and problems in meeting them, at the managerial level, it’s about their productivity and budget problems, and at the top management level, it’s about their problems with the bottom line - earnings or cash flow.
One of the most common obstacles raised at this point is why customers would be willing to share detailed, confidential information for all of their components and productions steps. Granted, if you take the traditional approach of waiting until you have a solution and then asking for economic information, you will struggle getting good data. The customer knows you are trying to put a price tag on your solution and will either not be forthcoming or will downplay the value in hopes of a lower price. Alternatively, start early and make it clear to the customer that if the economics benefit all parties, you would be interested in developing a solution for them. This is the information you need to focus the development effort on creating ΔT, I, & OE for everyone. My experience is that customers will provide a surprising amount of information. Certainly enough to understand what value a solution can create for both you and the customer.

Consumer markets:

In consumer markets, we apply a different lens to customer value. The primary difference is in the definition of customer value. For consumers, convenience, emotion and status driven issues such as brand and fashion can play a much larger role. That’s not to say that consumers don’t buy on price, but they rarely conduct side by side economic analyses. The early popularity of Toyota’s Prius hybrid attests to this with a payback period that was often longer than the expected life of the car. Nonetheless, the market for hybrids grew rapidly in large part due to the emotional connection that consumers feel with being green.

An alternative approach is to look at the jobs consumers are trying to do along with their key buying tradeoff. What are the tradeoffs along traditional and emerging competitive dimensions? Innovation then becomes a search for how these jobs can be done better along various lines - all as the basis for a new competitive dimension. As an example, iRobot was able to identify vacuuming and floor washing as time wasting job in the busy lives of today’s families. The Roomba® robotic vacuum and Scooba® floor cleaner automatically take care of this job for consumers. How do they stack up along various competitive dimensions? They’re good but not nearly as effective or inexpensive as most alternatives. But iRobot chose to compete on convenience – a new dimension that has allowed them to bypass the market constraint of lower competitor pricing and establish a completely new market for automated cleaning.

Innovation tools

Training and investment in innovation tools can help to develop strengths in the processes and skills necessary to elevate the innovation capacity of your organization.

Thinking processes for problem solving:

Inventions solve problems by resolving contradictions. Carbon fiber composites are a great example of an invention that can be used to solve the contradiction between strength, weight and speed. Nanotechnology is intended to solve the con-
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Hinge Assumptions:
The critical assumptions upon which the success of any project hinges. It is critical to check the validity of hinge assumptions as early in the project as possible. If a project is going to fail, you want to find out quickly and cheaply.

Guided Innovation Mapping:

As teams work through the planning and execution of a project, Guided Innovation Mapping can be a particularly useful tool. A variation on the TOC prerequisite tree thinking tool, it identifies where innovations will be required and facilitates development of simple solutions. It also identifies the critical or hinge assumptions which the team must consider for the project.

After project objectives are established, the project leader and cross functional team take part in a facilitated session where each participant is asked “What are all the possible obstacles that you could dream of that might cause this project to fail?” The simple act of asking people to provide input on why something might fail opens their minds up to think in new ways and eliminates the passive aggressive behavior that can hurt team effectiveness. The wording of the question is important because we want them to be open and not to worry about being viewed as cynical or pessimistic. Of course, the team’s next task is to develop a plan that gets around all of these obstacles and categorizes the resulting project steps as technical, commercial, manufacturing, or regulatory.

Guided Innovation Mapping helps the team to understand where their innovation efforts must be focused. The hinge assumptions about key project constraints that come out of it are important tools for helping the team prioritize its efforts. Another benefit of this tool is that the team ends up jointly developing a visual version of the project plan including most of the inputs needed for Microsoft Project or other project planning tools.

One example comes out of the refrigeration industry where an industrial client desired to begin moving some of its high durability, high efficiency technology into the commercial green building industry. Since the team had all of the technology required, it would have been easy to just begin development. However, through the process of innovation mapping, we identified that commercial feasibility was a critical assumption that had not been confirmed. With some quick competitive intelligence, the team verified the unmet need but found that customer payback requirements of 18-36 months resulted in a price point much lower than the team had anticipated. This forced the team to rethink their entire design and look for opportunities to simplify the option packages offered and value engineer nearly 35% out of the cost of their offering. It may just sound like common sense, but without disciplined planning and feasibility tools in place, companies can allow projects like this to get quite far along before identifying and dealing with potentially fatal flaws.
Design of experiments, modeling and simulation:
If your constraint is in development or testing, reducing the number of experiments required to commercialize a product can increase throughput and cut cycle time. Statistical design of experiments is the first place to start. These methods help researchers to create experimental plans with a minimum number of data points. JMP is one of the most widely used tools for DOE. Computer modeling and simulation goes a step further allowing researchers or designers to conduct virtual experiments and play what if simulations to predict performance.

Employee development & selection
Having top talent is important throughout the organization, but nowhere more than in the group entrusted to making money in the future. The product managers, engineers, scientists, and technologists in these roles can have a profound impact on your success. There are many good resources available on top-grading your team, but it is crucial to have regular development discussions with your people including frank discussions about their skills and competencies and whether they have the ability to become top talent in their current roles.

Open innovation
One of the single largest bottlenecks of any organization is simply that there are only so many managers, so many funds to invest, and so many people to carry out the work. One solution to elevating your capabilities is open innovation. By reaching outside the walls of your own company to bring in technology or market opportunities through alliances, you can access the innovation capabilities of a wide array of external players – other companies, research firms, start-ups, universities, entrepreneurs, etc. On the other hand, if you have the technology but don’t have the channel to market, you can extend your reach through licensing or marketing alliances.

But before you get too excited and run out to put together that alliance, you should know that nearly 70% of alliances fail. Why such a high percentage? Because people often get caught up in the excitement of the deal and don’t pay attention to the fundamentals of strategic alignment between the partners. Alliances add a level of complexity that you must be ready for and should only be given serious consideration after you have attained some level of discipline and capability with your own projects. Much has already been written on the subject of alliances, so rather than going into detail let me just say that in order to successfully implement OI, you must develop competencies in four areas:

- **Want** - Defining the outside capabilities that you need
- **Find** - Finding potential partners that have those capabilities
- **Get** - Using proven process for partner selection and alliance negotiation
- **Manage** – Implementing and managing the alliance

**Procter & Gamble** has transformed itself through its Connect & Develop open innovation program.

P&G’s leadership embraced OI and built a strong competency in connecting with outside technology. While “Not invented here” had been strong at work in the past, they now celebrate “Proudly invented elsewhere” with a goal to have 50% of their new product pipeline originate outside the company.

“You cannot meet your growth objectives if you ignore all of the smart people out there who are not on your payroll.”

- Henry Chesbrough
  Author, *Open Innovation*
5. START AGAIN & DON'T LET INERTIA BECOME THE NEXT CONSTRAINT

It’s time to start the cycle again and refocus another round of improvement efforts on the next constraint. As you drain the swamp, another alligator will surface. As soon as one innovation constraint is broken, another will show-up and there is further gain in addressing it. That is the nature of continuous improvement. Identify, exploit, subordinate, elevate, and do it all over again. Stopping after a single round means that inertia has become your constraint and you only end up stagnating at a higher level.

Before proceeding with the next round, you also should examine whether the policies that governed the old bottleneck might not apply anymore. For example, the rule might have been that certain members of the development team were always kept 100% busy doing development work in the lab. If that constraint has been broken and getting enough new ideas into the pipeline is the new constraint, does that policy still make sense? Perhaps getting those development people out into the field to better understand unmet customer needs would better serve your goal of making more money in the future. Similarly, are the metrics that were used previously still appropriate?

Putting it all to work

So, as leaders how do you begin to put this approach into practice? It would be easy to say that it’s just a matter of discipline in identifying your constraint and then taking the new product and service development activity in your business through the TOC focusing steps. But we all know change is more difficult than that. There are multiple layers of resistance that you must be prepared to take your organization through.

Six Layers of Resistance:

1. Has the right problem been identified?
2. Is this solution leading us in the right direction?
3. Will the solution really solve the problems?
4. What could go wrong with the solution? Are there any negative side-effects? How can we avoid them?
5. Is this solution implementable? What is our plan?
6. Are we all really up to this? Is management committed to ongoing innovation improvement or is this just another pro-

It is critical that people feel secure in expressing their opinions and issues without having it blow back on them. A facilitator can help with the process, but as the leader you must be there and establish trust to help bring them through the layers of resistance.

You’ll find that your people develop common sense solutions. But maybe more importantly, you’ll find that their ownership of the solution creates the commit-
ment needed to break the constraints holding back your growth and achieve your goals of making more money in the future.
Reference notes:


Note – Certain examples have been disguised to protect client identity and proprietary information.